

09/895,868

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 - 43. (Cancelled)

44. (Previously Presented) Method for recognizing text in a captured imagery, said method comprising the steps of:

- (a) detecting a text region in the captured imagery;
- (b) adjusting said detected text region to produce a rectified image;
- (c) applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery;

wherein said adjusting step (b) comprises the step of (b1) computing a base line and a top line for a line of detected text within said detected text region;

wherein said base line and said top line are estimated by rotating said line of detected text at various angles and then computing a plurality of horizontal projections over a plurality of vertical edge projections; and

wherein said base line is selected that corresponds to a rotation angle that yields a steepest slope on a bottom side of one of said plurality of horizontal projections.

45. (Previously Presented) Method for recognizing text in a captured imagery, said method comprising the steps of:

- (a) detecting a text region in the captured imagery;
- (b) adjusting said detected text region to produce a rectified image;
- (c) applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery;

wherein said adjusting step (b) comprises the step of (b1) computing a base line and a top line for a line of detected text within said detected text region;

09/895,868

wherein said base line and said top line are estimated by rotating said line of detected text at various angles and then computing a plurality of horizontal projections over a plurality of vertical edge projections; and

wherein said top line is selected that corresponds to a rotation angle that yields a steepest slope on a top side of one of said plurality of horizontal projections.

46. (Previously Presented) Method for recognizing text in a captured imagery, said method comprising the steps of:

(a) detecting a text region in the captured imagery;

(b) adjusting said detected text region to produce a rectified image;

(c) applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery;

wherein said adjusting step (b) comprises the step of (b1) computing a base line and a top line for a line of detected text within said detected text region;

said adjusting step (b) further comprises the step of (b2) computing a dominant vertical direction of character strokes for a line of detected text within said detected text region; and

wherein said dominant vertical direction computing step (b2) comprises the step of computing a plurality of vertical projections over a plurality of vertical edge transitions after rotating said line of detected text in a plurality of degree increments.

47. (Previously Presented) The method of claim 46, wherein said dominant vertical direction is selected that corresponds to an angle where a sum of squares of said vertical projections is a maximum.

48. (Previously Presented) Apparatus for recognizing text in a captured imagery, said apparatus comprising:

means for detecting a text region in the captured imagery;

means for adjusting said detected text region to produce a rectified image; and

09/895,868

means for applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery;

wherein said adjusting means computes a base line and a top line for a line of detected text within said detected text region;

wherein said base line and said top line are estimated by rotating said line of detected text at various angles and then computing a plurality of horizontal projections over a plurality of vertical edge projections; and

wherein said base line is selected that corresponds to a rotation angle that yields a steepest slope on a bottom side of one of said plurality of horizontal projections.

49. (Previously Presented) Apparatus for recognizing text in a captured imagery, said apparatus comprising:

means for detecting a text region in the captured imagery;

means for adjusting said detected text region to produce a rectified image; and

means for applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery;

wherein said adjusting means computes a base line and a top line for a line of detected text within said detected text region;

wherein said base line and said top line are estimated by rotating said line of detected text at various angles and then computing a plurality of horizontal projections over a plurality of vertical edge projections; and

wherein said top line is selected that corresponds to a rotation angle that yields a steepest slope on a top side of one of said plurality of horizontal projections.

50. (Previously Presented) Apparatus for recognizing text in a captured imagery, said apparatus comprising:

means for detecting a text region in the captured imagery;

means for adjusting said detected text region to produce a rectified image; and

means for applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery;

09/895,868

wherein said adjusting means computes a base line and a top line for a line of detected text within said detected text region;

wherein said adjusting means further computes a dominant vertical direction of character strokes for a line of detected text within said detected text region; and

wherein said adjusting means computes said dominant vertical direction by computing a plurality of vertical projections over a plurality of vertical edge transitions after rotating said line of detected text in a plurality of degree increments.

51 (New) Method for recognizing text in a captured imagery, where said captured imagery is of a three-dimensional scene, said method comprising the steps of:

- (a) detecting a text region in the captured imagery;
- (b) adjusting along three axes said detected text region to produce a rectified image, wherein said adjusting comprises the steps of:
 - (b1) computing a base line and a top line for a line of detected text within said detected text region; and
 - (b2) computing a dominant vertical direction of character strokes for a line of detected text within said detected text region, wherein said dominant vertical direction computing further comprises the step of computing a plurality of vertical projections over a plurality of vertical edge transitions after rotating said line of detected text in a plurality of degree increments; and
- (c) applying optical character recognition (OCR) processing to said rectified image to recognize the text in the captured imagery.